

**Notice of Allowability**

Application No.

10/671,534

Examiner

Thomas M. Ho

Applicant(s)

HO ET AL.

Art Unit

2132

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/23/07.
2. ☒ The allowed claim(s) is/are 1 and 2.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

### DETAILED ACTION

1. Claims 1-2 are pending.

#### *Examiner's Comment*

In the amendments and arguments submitted by the Applicant on 5/23/07, the Applicant designates the serial number of the case/response as 11/671,534. That is incorrect. The serial number of the case is 10/671534. The serial number 11/671,534 is currently designated for a different Applicant.

#### *Reasons for allowance*

2. Previous the Examiner rejected the claims under 35 USC 112.

*Additionally, the Applicant does not disclose how a digital video work has two color matrixes. If the composite color information of a digital video work is aggregated, it may be considered a single color matrix. On the other hand, the color information within a digital video work may be logically divided into numerous subunits. The applicant is required to clarify what in particular constitutes a color matrix in reference to a digital video file, and how a password is added to mere data.*

Art Unit: 2132

The Examiner has considered Applicant's arguments and amendments and has found them to overcome the previous rejection.

The Applicant has opted for a more specific term chrominance arrays as opposed to color matrixes. The recitation of the chrominance data as a specific array data structure negates the possibility of the color information aggregated as a single color matrix wherein a "color matrix" is defined as a "color palette" of sorts.

In reference to claim 1:

Yeung et al. (Column 8, lines 1-20) & (Column 7, lines 7-22) discloses a method of protecting copyright of a digital video work, comprising the steps of:

- Adding a password to each of two color matrixes of said digital video work first; (Column 8, lines 1-20) & (Column 7, lines 7-22)
- Entering said password to a specified video player; (Column 8, lines 1-20)
- Playing a complete visual effect on said video work after said video work being published on Internet, if said password being correct; (Column 8, lines 1-20)

Yeung et al. fails to disclose:

Playing a partial gray-scale visual effect of said video work if a video player other than said specified video player being used for playing said video work.

Art Unit: 2132

Yeung et al. instead discloses that if the password is not, correct, a digital video version of substantially inferior quality will be played instead. (Column 8, lines 1-20)

It would have been obvious to one of ordinary skill in the art to modify Yeung et al. to play a partial-complete gray-scale visual effect as the substantially inferior video quality displayed in Yeung et al. because playing a gray-scale video version is generally recognized as a lower quality version and is computationally less intensive than rendering full color video.

Yeung et al. however fails to disclose a second chrominance array and

Reading said digital video work published on the Internet and determining whether the first password for each for said chrominance arrays is identical to said second password in said specified video player.

Although a second chrominance array would merely involve the obvious step of declaring a second instance of the array data structure, the claim recites in the preamble that the color and gray-scale data are arranged in respective chrominance arrays.

Color data is often stored in a form of RGB data wherein the information is stored as purely color data. Because of this reason, the step of using a second array for the sole purpose of storing gray-scale data is a non-obvious step that requires additional memory resources for each frame of the video. Although it is well known in the art to derive a gray-scale equivalent based

Art Unit: 2132

on color information, the Examiner has not uncovered a recitation or motivation in the prior art why this mechanism is used in copyright protection method.

Furthermore, Yeung et al. fails to explicitly disclose the reading and comparing of two passwords to each other.

For these reasons, Applicant's arguments and amendments have overcome the prior art of Yeung et al.

Accordingly independent claim 1 and dependent claim 2 are allowable.

### *Conclusion*

3. The following art not relied upon is made of record.
  - US patent 5425101, discloses a method of authorizing multiple virtual channels for video data.
  - US patent 4682360 discloses a method of transmitting program information in a multilevel format.
4. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

Art Unit: 2132

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799.

The Examiner may also be reached through email through [Thomas.Ho6@uspto.gov](mailto:Thomas.Ho6@uspto.gov)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist Telephone: 571-272-2100 Fax: 571-273-8300

Customer Service Representative Telephone: 571-272-2100 Fax: 571-273-8300

TMH

June 6<sup>th</sup>, 2007

*Thomas M Ho*  
*AU2132*

*Gilberto Barron*  
GILBERTO BARRON JR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100